

REMARKS

The Examiner's objections to the drawings have been overcome by amending the claims.

A new title of the invention has been suggested herein.

The specification has been reviewed and amended to avoid the Examiner's objections thereto. No new matter has been added in the application.

Claims 1-10 are rejected under 35 U.S.C. §112, first paragraph. Claims 1 and 7 have been amended to comply with the disclosure and it is believed that this rejection has been overcome. Claims 2, 5, and 8 have been amended to avoid the rejection under 35 U.S.C. §112, second paragraph.

Claims 1-4 and 7-9 are rejected under 35 U.S.C. §102 as being anticipated by Takemura. Claim 5 is rejected under 35 U.S.C. §103 as being unpatentable over Takemura in view of Bigham. Claims 6 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takemura in view of Shimada and claim 11 is rejected under 35 U.S.C. §103(a) as being unpatentable over Takemura in view of Kuwahara.

The Examiner believes that Takemura teaches each and every feature of claims 1-4 and 7-9.

Regarding the rejections under 35 U.S.C. §103 it should be noted that Takemura et al. reference (filing date June 3, 1999) and the present application (priority date March 17, 2000) are commonly owned by Fujitsu Limited.

Referring now to the prior art cited by the Examiner, the Takemura disclosure teaches an apparatus in a state in which it connects DS1, VT 1.5 or ATM cell streams to a SONET network and is of a redundant configuration, and teaches, in particular, the pointer-related process executed at a time of the switching.

The present invention, on the other hand, is concerned with a method for connecting a DS3 signal containing ATM cells to a SONET network. In this way, these two inventions are distinguishable with respect to the claimed points.

The Takemura reference is primarily concerned with an apparatus which can select any of the three patterns, extracting (connecting) an ATM cell layer from the STS1 frame format of SONET, extracting (connecting) a VT signal from the STS1 frame format of SONET or extracting (continue extracting) a DS3 from the STS1 frame format of SONET.

The present application assumes the existence of an apparatus described in Takemura, as described in the “Description of the related art” section, which implies that there has been a multiplexing device for accommodating ATM cells in a new synchronous network (in other words, there has been an apparatus that extract an ATM cell stream from the STS1 frame format of SONET).

The present application assumes the existence of an apparatus described in Takamura, as described in the “Description of the related art” section, which implies that there has been a multiplexing device for accommodating ATM cells in a new synchronous network (in other words, there has been an apparatus that extract an ATM cell stream from the STS1 frame format of SONET).

The present application is directed to a feature that represents another twist made over those devices, the feature in which a DS3 signal that accommodates ATM cells is connected to a SONET network, instead of connecting an ATM cell stream to a SONET network.

The key feature of Takemura’s disclosure lies in the pointer-related process executed at a time of the switching when the apparatus is of a redundant configuration, the Takemura disclosure is not concerned with introducing an ATM cell stream into a SONET. The key point

of Takemura corresponds to the STS POH DET block of the drawing shown in Fig. 1. The detail of the process associated with this particular block is irrelevant to the present invention because it is not related to a redundant configuration and the pointer-related process is not required with the present invention apparatus.

As discussed above, it is clear that Takemura and the present invention differ from each other with respect to the key points constituting the respective invention features. Applicants are aware that the configurations associated with these two inventions include some equivalent portions (three portions, OHB drop, Spe Split and ATM cell the respective invention features. Applicants are aware that the configurations associated with these two inventions include some equivalent portions (three portions, OHB drop, Spe Split and ATM cell FIFO, and the part at which ATM and STM branch). But these features are indispensable for a SONET apparatus (two portions, OHB drop and Spe Split) and an apparatus for handling ATM (one portion, ATM cell FIFO).

The present application discloses an entire configuration required for implementing the present invention, which is related to connecting a DS3 signal that accommodates ATM cells to a new synchronous network.

Takemura fails to teach or suggest subject matter of independent claims 1 and 7 and claims 2-4 and 8-9 dependent thereupon. It is respectfully submitted that the rejection of these claims under 35 U.S.C. §102(b) as being anticipated by be withdrawn and these claims be allowed.

Regarding the teaching of PLCP in Bigham cited against claim 5 in combination with Takemura, it is submitted that the present invention does not include the PLCP format itself as any part of the claimed invention. Instead, according to the present invention, an apparatus will

have a function that is compatible with signals of the prior art PLCP format besides signals of the direct map format, in connecting a DS3 signal accommodating ATM cells to a SONET network. The Bigham patent merely teaches the PLCP format itself, and therefore, it is differing from the present invention as claimed.

Applicants contend that the present invention does not include the IDLE cell itself as any part of the claimed invention; it assumes the IDLE cell is known. Instead, according to the present invention, an apparatus will have a function that allows inserting or identifying of an unassigned cell or an IDLE cell in connecting a DS3 signal accommodating ATM cells to a SONET network. The Kuwahara patent cited against claim 11 in combination with Takemura teaches the IDLE cell, and therefore, it is different from the present invention.

Shimada applied against claims 6 and 10 in combination with Takemura relates to method for efficiently transmitting, to a SONET network, information indicative of a failure occurring in a network accommodating an ATM cell using CLP bits of an ATM cell instead of using cells such as an OAM cell for switching in the ATM. The present invention assumes presence of OAM cells and bits (such as CLP bits) nominated within an ATM cell in accordance to prior art specifications.

According to the present invention, Applicant's apparatus will have a function that allows inserting or identifying any of an STS1 payload associated with a SONET, a DS3 payload associated with a SONET, an unassigned cell or an IDLE cell when a signal failure of a high-order occurs in connecting a DS3 signal accommodating ATM cells to a SONET network. The present application does not seek a patent being granted for a modification applied to OAM cells or to bits (such as CLP bits) nominated within an ATM cell. Shimada rewrites bits nominated within an ATM cell, in particular, for rewriting CLP bits, and for this reason Shimada is different

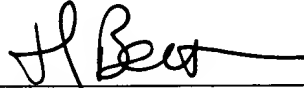
from the present invention. Both the present application and the OAM cell. The present application discloses that the apparatus holds a function for inserting OAM cells when inserting back pressure (OAM) cells and maintenance in response to a situation in which the transmission amount of ATM cells has exceeded, a memory capacity. This is also distinguishable over Shimada, in which OAM cells or nominated bits in an ATM cell are modified when a failure occurs within a network. With respect to the processing operation, Shimada exploits an ATM-cell-bit revising function for the switching in response to a failure, however, the configuration according to the present invention does not have a switching function and therefore, does not require the bit modifying process or OAM-cell processing operation as taught by Shimada.

In view of the foregoing it is respectfully submitted that claims 5, 11 and 6, 10 are patentably distinguishable over the prior art cited by the Examiner because Takemura taken alone or in combination with any of the references discussed above would not lead a skilled artisan to the invention as claimed in these claims.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper, not fully covered by an enclosed check, may be charged on
Deposit Account 50-1290.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'TJ Bean', written over a horizontal line.

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